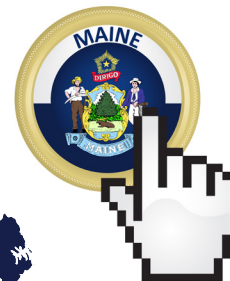




APCARBME issue 2



www.maine.gov/dep/air/mobile/catconverter.html

MAINE'S Catalytic Converters Requirements

Maine Catalytic Converter Facts

Effective June 1, 2018, the laws governing the sale and installation of aftermarket catalytic converters Maine changed.

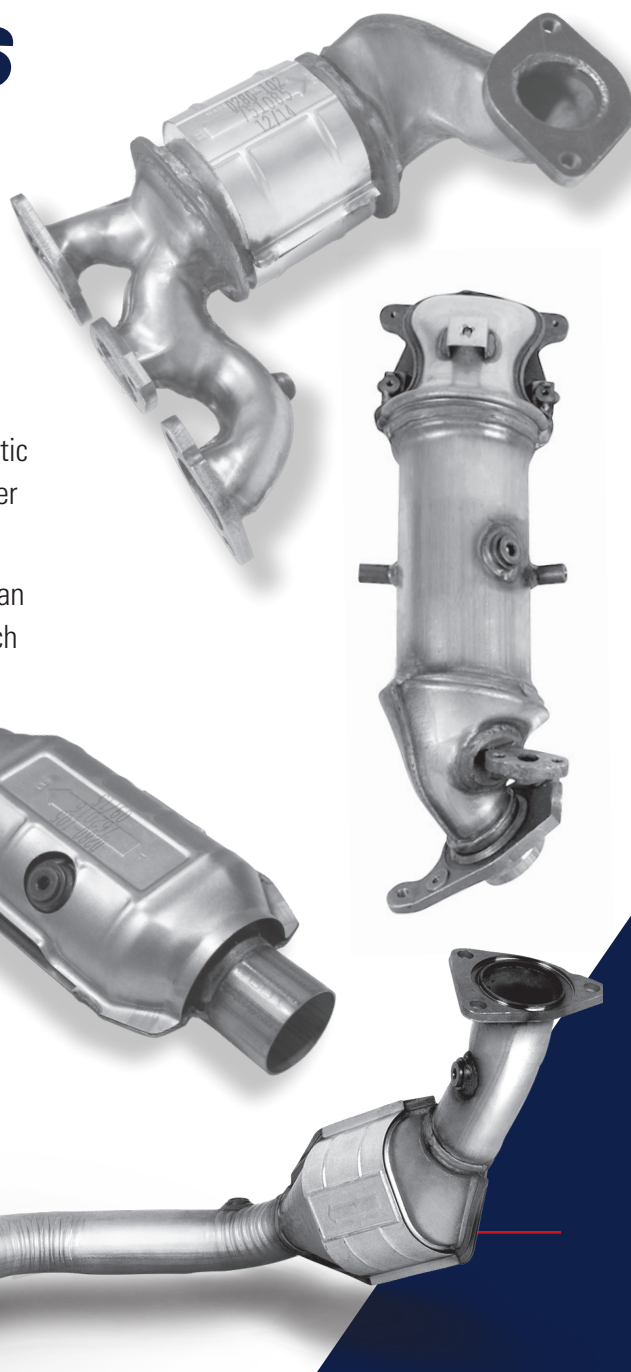
As of that date, it became illegal in the state of Maine for any person to sell, offer for sale, advertise, or install any new aftermarket catalytic converter for use on 2001 and newer CARB or EPA 50 state certified vehicles, unless that new aftermarket catalytic converter has been certified by CARB.

Federally certified new aftermarket catalytic converters may still be used on vehicles with a Federal-only

certification, including Federally certified vehicles from the model years covered by the new rules.

Used, salvaged, or recycled catalytic converters cannot be installed after June 1, 2018 on any vehicle.

Failure to follow the regulations can result in a fine up to \$2500 for each violation.



How to Select the Correct Converter Replacement in Maine:

Locate the Emission Control Information label, and ask these 3 simple questions:

1 Does the vehicle's emission label state that it meets or complies with Federal EPA emission standards?

If the answer is yes, then the customer is legally allowed to install a federal aftermarket catalytic converter that meets EPA guidelines, regardless of the vehicle's year/make/model.

If the label states that the vehicle is California emission compliant or 50-state legal, then ask question no. 2:

2 What model year is the vehicle?

If the customer has a California / 50-state emission vehicle from model year 1975 to 2000, they can legally install a Federal aftermarket catalytic converter that meets EPA guidelines.

NOTE: If the customer has a California / 50-state emission vehicle that is model year 2001 newer, they must install a CARB compliant aftermarket catalytic converter.

To find the proper converter type you must know:

- Vehicle Year, Make, Model
- Vehicle Engine Family Number or Test Group Number
- Vehicle Emission Type (LEV, ULEV, LEVII LEV)

3 What is the Engine Family Number?

If the Emissions Control Information Label indicates that the vehicle is a California / CARB / ARB vehicle, the "Engine Family Number" must also be determined.

This is sometimes called the "Engine Family Code," "Test Group," or "Group Number."

The number can be also found on the Emissions Control Information Label. It is vital to know the Family Number when picking a replacement converter. If the label is missing, be sure to contact the OE dealer for the engine Family Number. The number must match the manufacturer's catalog information for the part number available for that vehicle.

Complete information about Maine catalytic converter regulations can be found at:
www.maine.gov/dep/air/mobile/catconverter.html



Identifying AP Catalytic Converters

Identifying an AP Converter can be done by observing four markings that are stamped on to the converter.



California Executive Order Number

AP Part Number

Arrow is Exhaust Flow Indicator

Manufacture Date

History of CARB Regulations

The California Air Resource Board was established in 1967 and was created to maintain a healthy air quality for the state.

In 2007, the state of California placed regulations on the type of new aftermarket catalytic converters that could be sold and installed within the state. Maine adopted a similar aftermarket converter policy in 2018.

Now, to operate within the law, you must know how CARB regulations are interpreted for Maine.

Locating the vehicles Emission Control Information Label:

The following model year vehicles may use Federal /EPA certified aftermarket converters in the state of ME, if the vehicle requires a replacement converter:

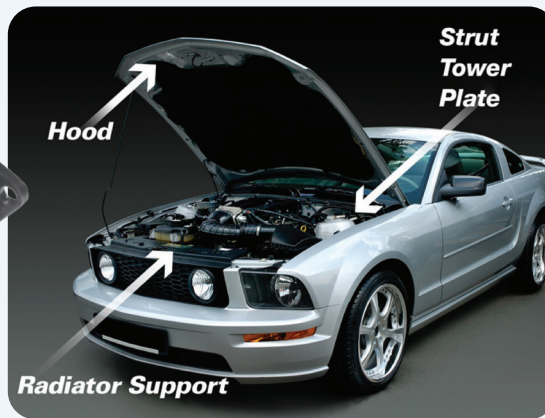
- Model Year 1975 to 2000
- Model Year 2001 & Newer if the vehicle is a Federal Emission Vehicle



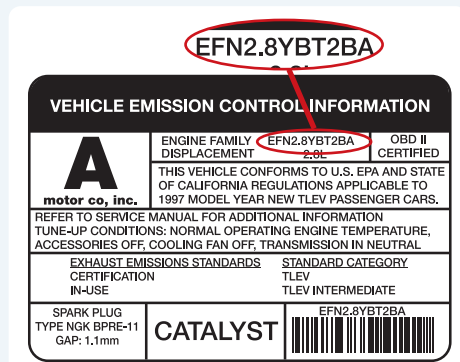
All US vehicles are required to have an Emission Control Information Label.

It can be located on the underside of the vehicle's hood, the radiator support, or on the strut tower.

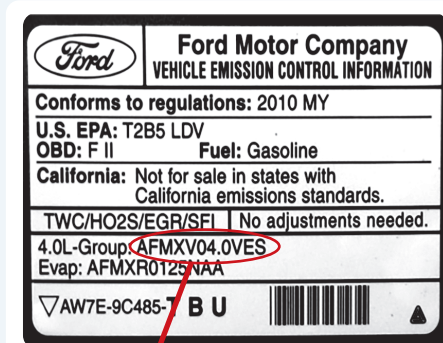
If the vehicle is California Emissions Certified, the label will reference "California," "CARB," or "ARB."



Federally certified vehicles' stickers will reference "Federal /EPA."



Typical label showing a California system.



Typical label showing a Federal system.

MAINE
Select The Right
Replacement Part!

For informational tech tips and support
visit us online at: www.apemissions.com
email us at: tech.line@apemissions.com
call us at: 1.800.277.2787



**No Used,
Salvaged,
or Recycled
Converters Can
Be Used After
June 1, 2018**

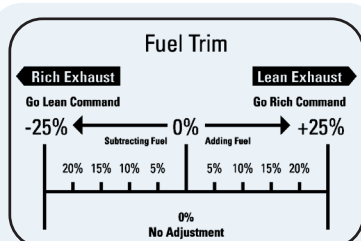
Aftermarket Catalytic Converter Requirements		
Vehicle Years	Vehicle Emissions Sticker	Replacement Converter
75 - 00	Federal /EPA 50-States California/CARB	Federal /EPA
01 - NEWER	Federal /EPA	Federal /EPA
	50-States	California / CARB
	California / CARB	California / CARB

Preventing contamination of a new converter

URGENT: If a catalytic converter has failed, it is up to the technician to thoroughly diagnose the problem to find out what caused the failure. If this is not done, it will eventually lead to failure of the new converter.

To prevent contamination of a new converter, follow these service procedures:

- 1 Retrieve all PCM (power train control module) trouble codes and make the required repairs for all codes before replacing the converter.
- 2 Review repair history and test base engine condition to ensure old converter is not damaged by engine issues such as oil consumption, low compression, or coolant leakage. Testing should include: relative compression test, power balance test, volumetric efficiency test and cooling system pressure / leak down test.
- 3 Check for any manufacturer's technical bulletins, recalls or PCM re-programming updates that may be required for the vehicle. Example: vehicle PCM Reprogramming updates that eliminate false P0420 or P0430 codes.
- 4 Inspect for any exhaust system leaks or restrictions. Repair any exhaust system leaks. Ensure there are no exhaust restrictions downstream of the converter being replaced. Exhaust restriction will overheat and ruin the new converter.
- 5 Test all O₂ sensors for proper operation and monitor fuel trims to be sure vehicle is in proper fuel control.
- 6 Ensure engine combustion chambers and fuel injectors are free of carbon deposits. Carbon deposits reduce combustion efficiency and overload the converter with excessive emissions that overheat and damage the converter. When required, clean the deposits with a cleaning system before converter replacement.
- 7 Verify proper EGR and secondary air injection system operation if equipped.
- 8 Inspect the original converter internally for overheating or melt down, soot and carbon deposits, or signs of coolant contamination. Determine and repair the root cause of the problem that caused the original converter to fail before replacing the converter.



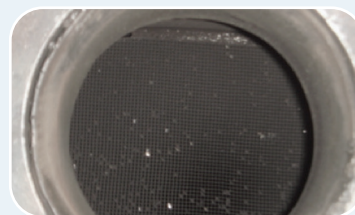
Normal long-term fuel trims are in the range of -10% to +10%. If outside of these parameters, further diagnosis is required.



Coolant from a head gasket leak on one cylinder has steam blasted carbon from the Right Inlet. Note the coolant contamination to the substrate.



Normal light gray coloration of converter inlet – indicates good mechanical operating condition.



Soot/carbon deposits at converter inlet indicating excessive oil consumption and excessive emissions entering converter.

Common Causes of Converter Failures



Improper Air/Fuel Ratio or Secondary Ignition System Misfires. Thermal Breakdown Due To Unburned Fuel.



Excessive Exhaust Temperatures.



Physical Impact Damage.



Carbon, Oil, Coolant Contamination.

